

The Action does not clearly identify what constitutes the coil support in Rabinowitz, or explain how the coil support in Rabinowitz is the same as the coil support recited in the claims. The coil support in Rabinowitz is a series of stacked core discs that are alternately stacked with several coil windings to form the rotor core. The rotor core is held together by a bolt that extends through the rotor core perpendicular to the planes of the coil windings. The bolt holds the core discs and coil windings together in a stack to form the rotor core. In Rabinowitz, there is no conduit extending through the rotor core, there are no coil supports extending from one side of the coil windings to the other side, and the coil supports are not thermally isolated from the rotor core. Accordingly, Rabinowitz does not anticipate any of the claims of this application.

Further, Rabinowitz does not disclose or suggest a coil support extending through a conduit that is thermally isolated from the conduit as is recited in claim 1. In addition, Rabinowitz does not disclose a conduit, through a rotor core where the conduit has openings on flat surfaces of the rotor core (see claim 2); a coil and coil support system thermally isolated from the rotor core (as recited in claim 4); an insulating tube inserted in at least one conduit of the rotor core to separate the coil support from the core (see claim 5); a conduit extending through the rotor core with openings on planar sections of the rotor core and a coil support extending through the conduit but thermally isolated from the conduit (as recited in claim 17); a coil support comprising a tension rod and a coil housing (as recited in claim 19); a coil support and coil at cryogenic temperatures and thermally isolated from the rotor core (as recited in claim 20); or an insulating tube inserted into a conduit of the rotor core (as recited in claim 21). Because Rabinowitz

does not disclose the invention recited in any claim, the rejections for anticipation should be withdrawn.

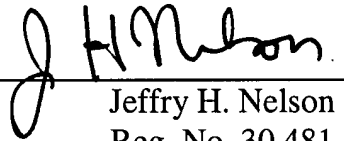
All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

Attached hereto is a marked-up version of the changes made to the specification and claim(s) by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

[0002] U.S. Patent Application Serial No. [___/___,___] 09/854,932 entitled
“Superconducting Synchronous Machine Having Rotor And A Plurality Of Super-
Conducting Field Coil Windings”, filed May 15, 2001 (atty. dkt. 839-1004);

[0003] INTENTIONALLY LEFT BLANK – PARAGRAPH DELETED

[0004] U.S. Patent Application Serial No. [___/___,___] 09/854,933 entitled “High
Temperature Super-Conducting Rotor Coil Support With Split Coil Housing And
Assembly Method”, filed May 15, 2001 (atty. dkt. 839-1006);

[0005] U.S. Patent Application Serial No. [___/___,___] 09/854,931 entitled
”Synchronous Machine Having Cryogenic Gas Transfer Coupling To Rotor With Super-
Conducting Coils”, filed May 15, 2001 (atty. dkt. 839-1007);

[0006] U.S. Patent Application Serial No. [___/___,___] 09/855,026 entitled “High
Temperature Super-Conducting Synchronous Rotor Coil Support With Tension Rods
And Method For Assembly Of Coil Support”, filed May 15, 2001 (atty. dkt. 839-1008);

[0007] U.S. Patent Application Serial No. [___/___,___] 09/854,946 entitled “High
Temperature Super-Conducting Rotor Coil Support With Tension Rods And Bolts And
Assembly Method”, filed May 15, 2001 (atty. dkt. 839-1009);

[0008] U.S. Patent Application Serial No. [___/___,___] 09/854,938 entitled “High
Temperature Super-Conducting Synchronous Rotor Having An Electromagnetic Shield
And Method For Assembly”, filed May 15, 2001 (atty. dkt. 839-1011);

[0009] U.S. Patent Application Serial No. [___/___,___] 09/854,940 entitled “High Temperature Super-Conducting Rotor Coil Support And Coil Support Method”, filed May 15, 2001 (atty. dkt. 839-1012);

[0010] U.S. Patent Application Serial No. [___/___,___] 09/854,937 entitled “High Temperature Super-Conducting Rotor Having A Vacuum Vessel And Electromagnetic Shield And Method For Assembly”, filed May 15, 2001 (atty. dkt. 839-1016);

[0011] U.S. Patent Application Serial No. [___/___,___] 09/854,944 entitled “A High Power Density Super-Conducting Electric Machine”, filed May 15, 2001 (atty. dkt. 839-1019);

[0012] U.S. Patent Application Serial No. [___/___,___] 09/854,943 entitled “Cryogenic Cooling System For Rotor Having A High Temperature Super-Conducting Field Winding”, filed May 15, 2001 (atty. dkt. 839-1062);

[0013] U.S. Patent Application Serial No. [___/___,___] 09/854,464 entitled “High Temperature Super-Conducting Racetrack Coil”, filed May 15, 2001 (atty. dkt. 839-1063); and

[0014] U.S. Patent Application Serial No. [___/___,___] 09/855,034 entitled “High Temperature Super Conducting Rotor Power Leads”, filed May 15, 2001 (atty. dkt. 839-1064).

IN THE CLAIMS

1. (Amended) A rotor for a synchronous machine comprising
a cylindrical magnetic solid rotor core having at least one conduit extending through the core and parallel to a core axis;

a race-track super-conducting coil winding extending around the rotor core,
wherein said coil winding is in a plane of the at least one conduit;

a coil support extending through the at least one conduit of the core and attaching
to opposite long sides of the coil winding, wherein a gap is between said coil support and
said conduit such that the coil support is thermally isolated from said conduit, and

a pair of end shafts extending axially from said core and attached to the core.

2. (Amended) A rotor as in claim 1 wherein the rotor core includes a pair of flat
surfaces formed on opposite long sides of the rotor core, and said long sides of the coil
winding are adjacent the flat surfaces, and wherein said at least one conduit has an
opening on each of said flat surfaces.

5. (Amended) A rotor as in claim 4 wherein an insulating tube inserted in the at
least one conduit of the rotor core separates the coil support from the core.

17. (Amended) In a synchronous machine, a rotor comprising:

a cylindrical rotor core having a pair of planer sections on opposite sides of the
core and extending longitudinally along the core, at least one conduit extending through
said core and having openings on each of said planer sections;

a super-conducting coil winding extending around at least a portion of the rotor
core, said coil winding having a pair of side sections adjacent said planer sections of the
core, and said side sections aligned with the openings of the at least one conduit;

a coil support extending through the at least one conduit and attached to the side sections of the coil winding, wherein said coil support is thermally isolated from the rotor core;

a first end shaft extending axially from a first end of the rotor core, and
a second end shaft extending axially from a second end of the rotor core.

19. (Amended) In a rotor as in claim 17 [further comprising a] wherein said coil support [including] further comprises at least one tension rod extending through the at conduit of the core and said tension rod attaches [attaching] to coil housings at opposite ends of the rod, wherein each coil housing wraps around one of the side sections of the coil.

21. (Amended) A rotor as in claim 20 wherein an insulating tube inserted in the conduit of the rotor core separates the tension rod from the core.